NEA

Research Bulletin

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Executive and editorial office
Research Division, National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D. C.

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Salaries of Urban Teachers Rising Slowly

Small urban districts have lowest salaries but are showing greatest advances

SALARIES IN URBAN school systems are advancing, but not as rapidly as in rural areas. Although the margin of difference is less than in former years, teachers in large urban centers are still paid substantially more than teachers in smaller districts.

The NEA Research Division has recently completed its nineteenth biennial survey of salaries in urban school systems. Some high lights of the findings are these:

- Urban classroom teachers in 1958-59 received an average salary of $5313, as compared with an average salary of $4775 for classroom teachers in all public schools, both rural and urban.
- Only 5.3 percent of urban classroom teachers were paid as much as $7500 in 1958-59, and 4.5 percent were paid less than $3500.
- The great differences in salaries that once existed between the largest and the smallest urban school systems are shrinking rapidly.
- Somewhat greater salary recognition is given to advanced preparation in the middle-sized cities than in the largest and smallest.
- Whereas for a number of years average salaries of classroom teachers were rising faster than salaries of administrators, the current study shows recent percentage increases as great for administrators as for teachers.

Median and Average Salaries

About 757,000 classroom teachers were at work in urban school systems in 1958-59. If all their salaries had been added into a single amount, and that amount divided by the total number of teachers, the resulting average salary would have been about $5313.

If the teachers had been ranked from highest to lowest according to salary, and grouped by $1000 intervals in salary, 1 in 20 would have been in the group receiving $7500 and over, and nearly as many in the group receiving less than $3500. Nearly 1 in 3 would have been classified in the group earning $4500 to $5499.

The teacher whose rank in salary was half way between the highest and the lowest (the median) would have had a salary of $5153.

The mean, or arithmetic average, salary is perhaps the better measure for salary comparisons if the point being considered is the relative amount of money being spent on teaching service. The median salary is perhaps the better measure if the point being considered is the relative status of teachers, as it identifies the teacher who stands at the midpoint in the salary distribution. The current salary studies of the NEA Research Division commonly show both measures in reporting salaries both for individual school districts and for groups of districts. In this article, arithmetic averages are used.

Additional details on the topics covered in this article may be found in Research Report 1959-R16, *Salaries and Salary Schedules of Urban School Employees, 1958-59*. The 1958-59 biennial salary survey of urban school districts has been released in a series of Research Reports, of which 1959-R16 is a summary.

The figures cited earlier are weighted estimates for *all* urban classroom teachers, based on salaries reported for 619,092 teachers by school superintendents in 2596 urban school districts. The 1958-59 study was the nineteenth biennial salary survey conducted by the NEA Research Division. Only a remarkable degree of co-operation and effort on the part of school superintendents' offices, in compiling extensive data for each local school system, has made these continuing studies possible.

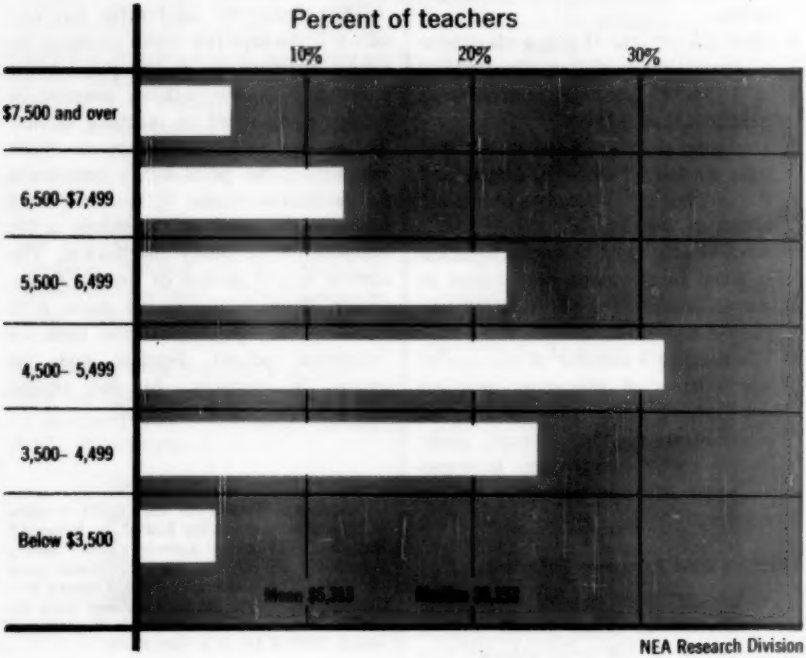
Urban-Rural Comparisons

Urban school teachers have consistently earned much higher salaries than rural teachers, but the former extreme differences are being reduced.

In 1958-59, when the average salary of urban teachers was found to be $5313, the average salary of all classroom teachers, both rural and urban, was estimated at $4775, which was about 10 percent less than the urban average. The average *rural* teacher's salary in 1958-59 was estimated at $4013, which was 25 percent below the urban average salary.

This represents a slight advance for rural teachers during the present decade, from 29 percent below urban teachers in average salary in 1950-51. Still earlier figures, reported for 1935-36 in the *Biennial Survey* of the U. S. Office of Education, showed that the average rural salary was only 45 percent of the average urban salary.

SALARIES PAID CLASSROOM TEACHERS IN URBAN SCHOOLS IN 1958-59



NEA Research Division

Large Districts vs. Small Districts

The salary studies of the NEA Research Division show salaries separately for six groups of districts according to population. The largest districts, of 500,000 population and over (Group I), include 26 districts when grouped according to population estimates for the year 1957. The smallest urban districts, of 2500 to 4999 population (Group VI), include 568 districts in the 1958-59 classification of districts.

From the earliest salary studies of the NEA Research Division in 1923, salaries have been substantially higher in the large districts than in the small ones. However, just as rural and urban salaries are coming closer together, so are salaries in the larger and the smaller urban school districts. Also, the differences among the larger districts are lessening.

Going back nearly 30 years, to the figures for 1930-31, we find that there was a consistent upward progression in salaries from smallest to largest population groups. The salary in Group III, districts 30,000-99,999 in population, may be taken as a reference point, with a value of 100.0 percent. In 1930-31, the median salary in Group I was 141.6 percent of that for Group III, or 41.6 percent higher. The salary in Group VI was only 74.3 percent, or 25.7 percent lower than Group III. The relationships for Groups II, IV, and V showed a regular downward progression—114.0 percent, 88.2 percent, and 81.5 percent.

But in 1958-59 the range of differences from Group VI to Group I—87.1 percent to 112.6 percent—was only about as much as the range in differences from Group IV to Group II in 1930-31. And the average salary in Group III districts was actually a shade higher than in the next larger districts of Group II.

AVERAGE SALARIES OF CLASSROOM TEACHERS IN SIX POPULATION GROUPS, 1958-59

School district groups, by population	Average salary, 1958-59	Salaries in all groups expressed as a percent of the salary in Group III	
		1930-31*	1958-59
I. 500,000 and over	$5,969	141.6%	112.6%
II. 100,000-499,999	5,260	114.0	99.2
III. 30,000-99,999	5,300	100.0	100.0
IV. 10,000-29,999	5,058	88.2	95.4
V. 5,000-9,999	4,755	81.5	89.7
VI. 2,500-4,999	4,616	74.3	87.1

* Based on medians.

Salaries by Preparation Level

In earlier studies of urban salaries by the NEA Research Division, salaries of classroom teachers were reported separately for elementary schools, junior high schools, and senior high schools. In 1958-59 the figures on salaries paid were not collected by school organization, but on the same basis as salary schedules are classified; namely, by level of preparation.

About 80 percent of the school districts which reported salaries of all classroom teachers combined were able also to report the figures separately by level of preparation. A good many of these, however, did not give separate salary figures for the lowest and the highest of the four classifications used. These were headed "less than four years" and "six years or more." The large majority reported figures for teachers with four but less than five years of preparation, and for those with five but less than six years.

When the teachers are divided into two groups—(a) those with less than five years of preparation and (b) those with five or more years—it is seen that the percent with five or more years was somewhat higher in Groups II, III, and IV than in the largest and smallest districts, as follows:

School district groups, by population	Percent of urban classroom teachers with five years of preparation or more
I. 500,000 and over	27.9%
II. 100,000-499,999	33.8
III. 30,000-99,999	36.0
IV. 10,000-29,999	30.4
V. 5,000-9,999	24.7
VI. 2,500-4,999	19.5

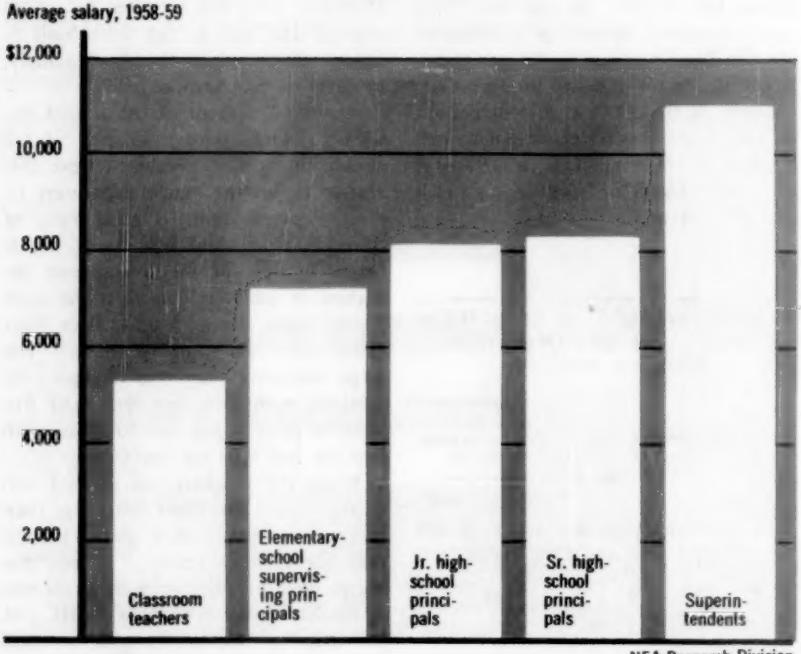
A weighted total for the six population groups showed that 31.1 percent of the teachers had completed five or more years of preparation.

Several of the very largest Group I cities unfortunately did not report salaries by level of preparation. Those reporting were below the Group I average in salary levels. Except for Group I, the cities that reported salaries according to level of preparation appeared to be representative, as their median and mean salaries were about the same as their respective population group totals.

About half the teachers were reported as having completed four years of preparation but less than five. Using the average salary of this basic group as 100 percent, relationships were computed to show the degree of salary recognition accorded to those with lower and higher levels of professional preparation.

Groups III and IV were similar in showing average salaries for teachers with less than four years of preparation

CHARACTERISTIC SALARIES IN CITY SCHOOL SYSTEMS, 1958-59



NEA Research Division

SALARY RELATIONSHIPS BY LEVEL OF PREPARATION, 1958-59

School district groups, by population	Average salary of classroom teachers as a percent of the average for teachers with four years of preparation but less than five years			
	Less than four years	Four years, but less than five	Five years, but less than six	Six years or more
I. 500,000 and over	109.6%	100.0%	112.8%	132.6%
II. 100,000–499,999	99.2	100.0	120.5	143.2
III. 30,000–99,999	95.5	100.0	120.5	135.1
IV. 10,000–29,999	96.4	100.0	120.7	135.0
V. 5,000–9,999	91.2	100.0	118.1	125.1
VI. 2,500–4,999	88.0	100.0	114.9	136.5

at about 4 percent less than for four-year teachers. These two groups were also almost identical in showing a 21-percent differential above four-year teachers for those with five years of preparation, and a 35-percent differential for those with six or more years. The smaller cities of Groups V and VI in general were more likely than the middle groups to hold down salaries for those with less than four years of preparation and to give less recognition for the fifth year.

Group I figures (which unfortunately do not include the largest cities which ordinarily dominate averages for this group) are erratic in showing higher salaries for those with less than four years of preparation, and also in showing relatively little recognition for the advanced levels of preparation.

Administrative Salaries

In 1958-59, the average urban school superintendent earned twice as much as the average classroom teacher; the secondary-school principal, somewhat more than 50 percent above the classroom teacher; and the elementary-school principal, about 45 percent more than the classroom teacher. Among population groups, of course, there were wide variations from these relationships. In the large systems, where separate schools are also large, the administrative differentials were much greater than in small school systems. And within each population group, extremely wide differences were found among school districts.

The relationships among the averages that represent the central tendency for the country as a whole are by no means to be thought of as desirable standards for any given school system. They give only a general picture of the broad range of relationships that now exist.

There have been some shifts in these relationships during recent years, due to different rates of change between classroom teachers and administrators.

During the 1930's the effect of the depression was to decrease all school salaries, but the impact was heavier on administrative salaries. When the 1940-41 salaries were compared with 1930-31 salaries in the same groups of districts, all medians for principals and superintendents in each of the six population groups were lower than they had been 10 years earlier. For classroom teachers, the 1940-41 figures were below those of 1930-31 in Groups III-VI but had risen slightly in Groups I and II.

During the decade of 1940-41 to 1950-51, the trend continued to be somewhat more favorable to salaries of classroom teachers. The most dependable comparisons can be made among three administrative groups that are represented in nearly all school systems —superintendents of schools and prin-

cipals of elementary schools and senior high schools. All salaries advanced from 1940-41 to 1950-51, but salaries for these three groups of administrators advanced by smaller percents than those for classroom teachers; this was true without exception for all six population groups. This trend is reflected in weighted total figures for all urban districts, which show that from 1940-41 to 1950-51 the average salary of classroom teachers rose 76.6 percent, while salaries of superintendents and the two groups of principals rose by lesser degrees, ranging from 59.8 to 63.8 percent.

From 1950-51 through 1958-59 no clear-cut differences were apparent in the percents of increase of classroom teachers' salaries and the salaries of these three administrative groups.

Weighted totals show slightly higher percents of increase during the present decade for administrators than for classroom teachers, but when the figures in separate population groups are examined, a consistent pattern cannot be found.

Elementary-school principals are found to have advanced more rapidly than classroom teachers from 1950-51 to 1958-59 in the four groups comprising the larger school districts, but not in the two smaller districts. And three of the four larger groups also showed greater percentage increases for principals in the past two years.

The senior high-school principals in five of the six population groups showed less increase than classroom teachers during the eight-year span from 1950-51 to 1958-59. But high-school principals in five of the six groups showed greater increases than teachers during the two years from 1956-57 to 1958-59.

From 1950-51 to 1958-59, superintendents' salaries increased substantially less than those of classroom teachers in all six population groups. The increases were also less for superintendents than for classroom teachers during the two years from 1956-57 to 1958-59 in all groups except Group I.

Thus it seems clear that there has been at least a levelling off of the trend, which continued through the years of depression and war, of advancing classroom teachers' salaries more rapidly than those of administrators.

Trends in Purchasing Power

Since the middle years of the depressed 1930's, the average earnings of employed persons in the United States have tended upward. This has been true not only in current dollars as paid, but in purchasing power as measured by the Consumer Price Index.

During all of this period, the average earnings of urban teachers have been

AVERAGE SALARIES PAID CLASSROOM TEACHERS, PRINCIPALS, AND SUPERINTENDENTS IN URBAN SCHOOL DISTRICTS, 1958-59

School district groups, by population	Classroom teachers	School principals			Superintendents of schools
		Elementary (supervising)	Junior high	Senior high	
I. 500,000 and over	$5,969	$9,531	$10,215	$11,456	$24,066
II. 100,000–499,999	5,260	7,560	8,615	9,248	17,204
III. 30,000–99,999	5,300	7,427	8,363	9,111	14,168
IV. 10,000–29,999	5,058	6,602	7,359	7,943	11,332
V. 5,000–9,999	4,755	5,939	6,377	6,936	9,290
VI. 2,500–4,999	4,616	5,685	5,632	6,392	8,369
Weighted average, all districts	$5,313	$7,731	$8,139	$8,373	$11,000

TRENDS IN PERCENTS OF INCREASE IN AVERAGE SALARIES—CLASSROOM TEACHERS, PRINCIPALS, AND SUPERINTENDENTS, IN URBAN SCHOOL DISTRICTS

Personnel groups	1940–41 to 1958–59	1940–41 to 1950–51	1950–51 to 1958–59	1956–57 to 1958–59
Classroom teachers	170.8%	76.6%	53.4%	10.6%
Supervising elementary-school principals	156.5	63.8	56.6	11.9
Senior high-school principals	156.2	59.8	60.3	12.8
Superintendents of schools	161.0	62.3	60.8	11.5

higher than those of all classroom teachers. Their average also has been higher than that of the great mass of American wage-and-salary employees, an average which is dominated by the earnings of clerical, sales, agricultural, and industrial workers.

Prices have risen, but national production has increased sufficiently to provide salaries that give higher general levels of living. The trends in purchasing power, by four-year intervals beginning in 1930-31, may be seen in the following figures:

School year	Purchasing power of average earnings in 1958-59 dollars		
	Urban classroom teachers	Instructional personnel, all public schools	All wage-and-salary workers*
1930-31	$3,552	$2,657	$2,433
1934-35	3,636	2,647	2,404
1938-39	4,048	2,933	2,639
1942-43	3,547	2,715	3,268
1946-47	3,556	3,021	3,362
1950-51	3,950	3,564	3,628
1954-55	4,700	4,280	4,168
1958-59	5,313	4,935	4,341

* Calendar years, 1931, 1935, 1939, 1943, 1947, 1951, 1955, and 1958.

These figures show that in the 1930's, urban teachers were paid at least a third more than the typical school instructional worker in the public schools. In the 1950's, however, the superiority of the urban salary dropped to less than 10 percent.

Significant also is the relationship of school salaries to the earnings of all workers. During the 1930's and the recent 1950's, average school earnings were higher than average wages and salaries in general; during the 1940's the average school instructional employee actually earned less than the average wage-and-salary worker. The current prosperity will undoubtedly raise the 1959 figure for all wage-and-salary workers well above the relatively low figure shown for the recession year of 1958.

Continuing figures on earnings of American professional workers are lacking; various reports for recent years for professional-technical workers — a group that includes but is not limited to professionals — have indicated incomes ranging from 35 to 70 percent above those of all workers. The 1950 Census figures for a group of distinctly professional workers revealed earnings more than 80 percent above those of all workers. Whatever the exact figures, it is clear that earnings for urban school employees, although steadily moving upward, have far to go in reaching professional levels.

Schools and Scholarship in Demand

Continuing increases in the school-age population have far-reaching implications

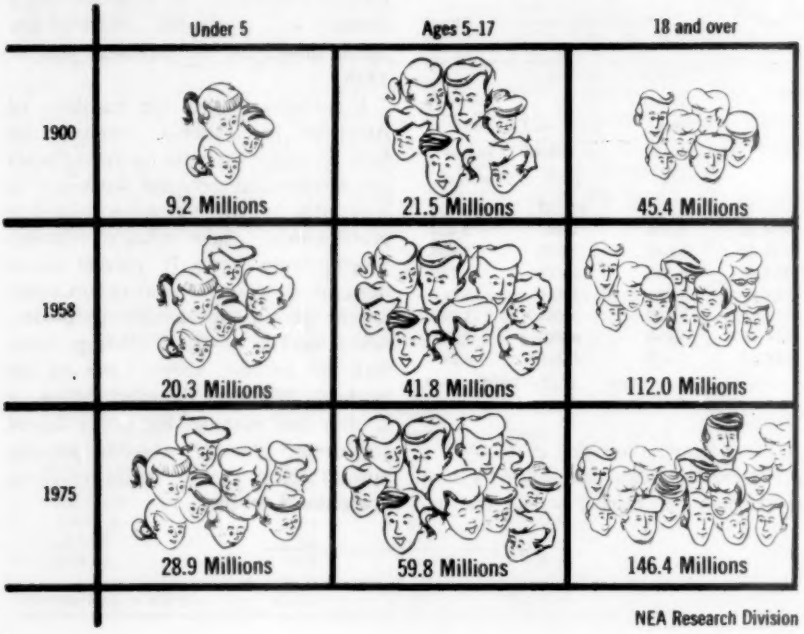
THE TOTAL POPULATION of the United States doubled from 1900 to 1950, while school-age population (5-17) increased only 43 percent. From 1950 to 1975, however, the school-age population is expected to about double, while total population will increase only 55 percent.

	Population (in millions)		
	1900	1950	1975 (est.)
Ages 5-17	21.5	30.7	59.8
Total population	76.1	151.7	235.2

As a result, school enrollments will continue to rise, with a gradual shift in pressure from the elementary to the secondary level. From 1950 to 1965 (the last year for which private-school enrollment projections are available), the number of pupils attending elementary school will have increased 63 percent, while the number attending secondary school will have increased 92 percent. In 1950, 22.5 percent of all (elementary and secondary) pupils were in secondary schools; by 1965, the proportion is expected to be 25.5 percent.

The increasing number of secondary-school students has already affected both school plant and school personnel. The total number of public elementary

THREE-QUARTERS OF A CENTURY OF POPULATION GROWTH



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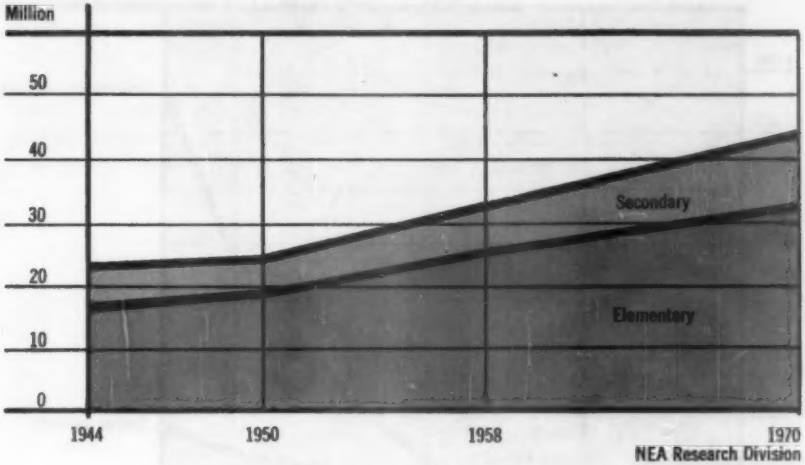
ENROLLMENT IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: 1944-1970



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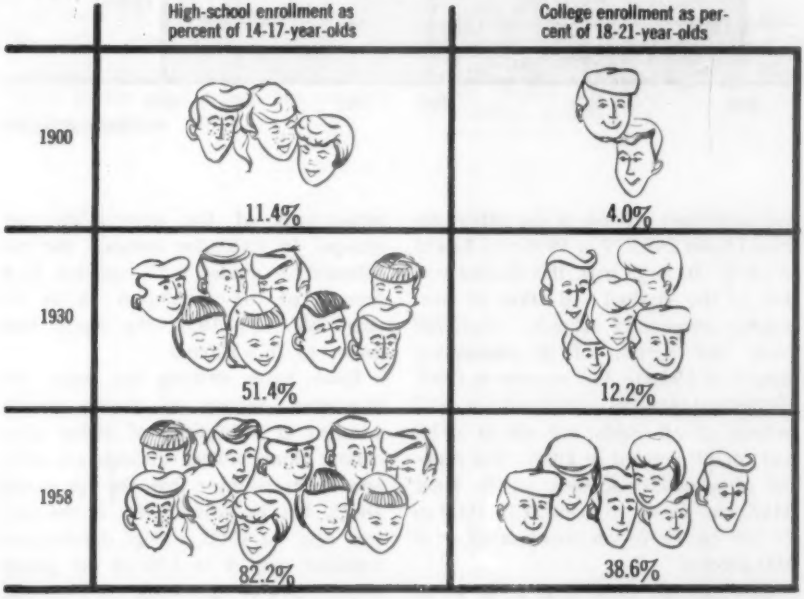
MORE YOUNG PEOPLE ARE NOW ENROLLED IN SCHOOL



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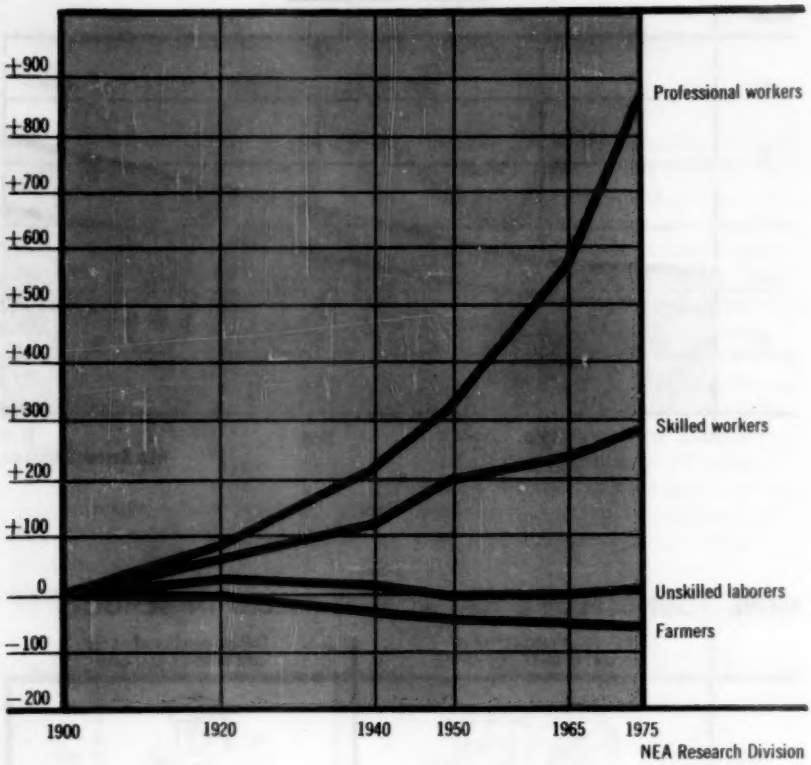
PERCENT CHANGE IN NUMBER OF WORKERS, 1900 TO SELECTED YEARS



and secondary schools in the nation declined from 248,279 in 1900 to 130,473 in 1956. In large part, this decline was due to the gradual reduction of one-teacher elementary schools, which fell from 74.2 percent of all elementary schools in 1920 to 33.5 percent in 1956. Elementary schools accounted for 94.7 percent of all public schools in 1920, and for 80 percent in 1956. The number of secondary schools, on the other hand, has grown from 6005 in 1900 to 26,046 in 1956—an increase of over 300 percent.

The upward trend is also shown in enrollments at various grade levels as percentages of the appropriate age groups. In 1900, for instance, the enrollment in grades 9-12 equalled 11.4 percent of the population 14 to 17 years old. By 1950, the figure had grown to 76.5 percent.

Even more striking has been the increasing percent of young people enrolled in institutions of higher education. Some college students are older and others younger than the age group 18-21, but in general, this is the college age. In 1900, college enrollments equalled only 4 in 100 of the group 18-21 years of age, while by 1959 the ratio was 4 in 10.

Secondary schools have succeeded not only in attracting, but in holding an ever-increasing number of students. High-school graduates as a percent of enrollment in grades 9-12 fell from 1900 to 1920, but have risen steadily since. The trend by decades shows a steady upturn from a low of 13.0 percent in 1920 to nearly 1 in 5 by 1964:

Year	High-school graduates as percent of students enrolled in grades 9-12
1900	15.1%
1920	13.0
1930	14.1
1940	17.3
1950	18.8
1960 (est.)	19.7
1964 (est.)	19.9

On a national scale, the increased holding power of the nation's schools is reflected in the rising educational level of the population over 25 years of age. Median school years completed rose from 8.6 in 1940 to 10.6 in 1957. By 1970, high-school graduation will represent the *median* educational attainment of the adult population, as these figures show:

Year	Median years of school completed, age 25 and over
1940	8.6 years
1950	9.3
1960 (est.)	10.8
1970 (est.)	12.0
1980 (est.)	12.2

That society is well able to absorb highly educated individuals is attested, not only by the higher salaries which have often been shown to be a dividend of increased education (see *NEA Research Bulletin*, October 1958, p. 83), but by the changing pattern of occupations.

An enormous increase is seen in the number of professional and technical workers from 1900 to 1950, and an almost comparable decrease in the numbers of farmers and laborers during the same period. Projections for the future show an ever-growing demand that larger percents of the labor force be prepared for professional and technical occupations that require at least four years of collegiate study.

For details see: National Education Association, Research Division. *Status and Trends: Vital Statistics, Education, and Public Finance*. Washington, D. C.: the Association, August 1959. 31 p. 25¢.

Educational Additions

211,882 pupils, 8307 teachers, and 538 schools

ALONG WITH GRASS SKIRTS and igloos, palm trees and parkas, our two newest states bring developed systems of education which measure up alongside the U. S. system as a whole.

Administration

Because there are no counties or boroughs in Alaska, all schools outside organized school districts, including the schools on military bases, are administered directly by the state board of education through the office of the commissioner of education. This means that salaries, equipment, and academic regulations are standardized within the school system.

Hawaii has four school districts and standardized administration in even greater degree. The salary schedule in effect for all teachers is written into the text of the state law. Salaries depend upon educational background and years of experience.

The curriculum is also standardized, and Hawaii is noteworthy in requiring two years of mathematics and two years of science for high-school graduation.

SCHOOL-AGE CHILDREN: CHARACTERISTICS

Items	Alaska	Hawaii	United States total
Number of school-age children (5–17), 1957	42,000	153,000	40,230,000
Number of pupils, 1959	48,182	163,700	40,406,000
Enrollment in public schools as a percent of school-age population, 1957–58	92.2%	84.4%	82.9%
Number of school-age children per 1,000 adults aged 21–64, 1957	592	869	455
Increase in public-school enrollment, 1948–49 to 1958–59	295.1%	60.5%	41.5%
Projected increase in enrollment, 1956–57 to 1962–63	81.0%	15.7%	21.3%
Average daily attendance as a percent of the number of pupils enrolled, 1955–56	83.5%	94.6%	89.0%

TEACHERS: PREPARATION AND SALARIES

Items	Alaska	Hawaii	United States total
Preparation			
Minimum preparation required for elementary-school teaching, 1957	90 hours	Bachelor's degree	*
Minimum preparation required for secondary-school teaching, 1957	Bachelor's degree	Bachelor's degree	*
Percent of elementary-school teachers with 4 or more years of college preparation, 1958–59	86.4%	77.3%	75.3%
Salaries			
Estimated average salary of public-school instructional staff, 1958–59	$6,500	$4,850	$4,935
Estimated increase, 1957–58 to 1958–59	4.8%	3.1%	4.6%
Number of teachers, 1959	1,802	6,505	1,291,929

* Of 50 states, 39 (and the District of Columbia) require a bachelor's degree for elementary-school certification. For secondary-school teaching, 48 require a bachelor's degree, and three (including the District of Columbia) require a master's degree.

Building Programs

The high proportion of school-age children in Alaska and Hawaii, combined with general population growth and increases in average educational attainment of the adult population, helps to explain why school building programs are particularly important. Since the end of World War II, Hawaii has been spending an average of $5 million a year for new school construction. Within the first 11 months of 1958, a total of 58 new school buildings were completed at a cost of more than $7 million. Twenty projects at a cost of $5 million were under construction. The same situation, in a somewhat less intense degree, exists in Alaska.

PUBLIC-SCHOOL FINANCE

Items	Alaska	Hawaii	United States total
Percent of public-school revenue from local governments, 1957–58	26.3%	18.0%	56.2%
Percent of public-school revenue from state governments, 1957–58	59.0	73.7	40.8
Percent of public-school revenue from federal government, 1957–58	14.7	8.3	3.0
Per-capita state expenditures for education, 1957	$74.76	$71.52	$39.37

EDUCATIONAL ATTAINMENT, 1950

Population 25 years old and over	Alaska	Hawaii	United States total
Percent with less than 5 years of school	12.9%	23.9%	11.0%
Percent with 4 years high school or more	25.6	31.2	33.0
Percent with 4 years college or more	7.3	6.1	6.0
Median school years completed	11.3 years	8.7 years	9.3 years

Teachers' Salaries

Because salaries are standardized throughout the states of Hawaii and Alaska, there is greater uniformity than on the mainland. Alaska now leads all states in instructional staff salaries, but the cost of living is some 45 percent higher than in Seattle, Washington. The average salary for teachers in Hawaii ranks twenty-second among the 50 states. The school budget for Hawaii for 1959-61 was set at $64 million. This includes for each instructional staff member an increase of $900 over last year's salary schedule.

Sources of State Tax Revenue

Sales and income taxes rank 1 and 2 as revenue producers

LEGISLATURES HAVE BEEN in session in 1959 in 46 states, and all of them have wrestled with state tax problems. Almost all have amended their existing tax structures, but few have adopted new taxes.

If states are looking for new revenue sources, the following summary suggests some possibilities:

- Seventeen states do not tax individual income.
- Fifteen states do not tax general sales.
- Thirteen states do not tax corporation net income.
- Four states do not tax cigarettes.

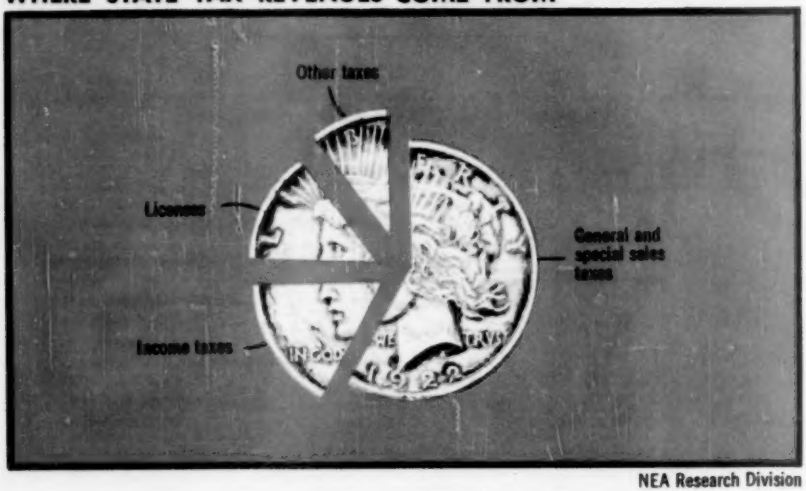
In total revenue the states rely most heavily on general and special sales taxes. Other sources provide a much smaller proportion of the total. However, the nationwide view is not necessarily true of individual states. For example, Oregon income taxes in 1958 amounted to 57 percent of that state's tax collections.

State tax collections as a whole produced $87.93 per capita in revenue in 1958. Per-capita revenue production by specific types of taxes follows:

General sales	$20.63
Motor fuels	17.19
Individual income	9.32
Motor vehicle and operators licenses	8.33
Corporate net income	5.79
Tobacco	3.63
Alcoholic beverages	3.34
Other	19.70
Total	$87.93

Information on the foregoing list of taxes is reported more fully in the pamphlet on which this article is based. Here, however, comments are restricted to sales, income, gasoline, and cigarette taxes.

WHERE STATE TAX REVENUES COME FROM



NEA Research Division

Sales Taxes

Sales taxes are usually based on gross amount of sales or gross receipts and are usually intended to be single turnover taxes. Food, as a major exemption, is not subject to the sales tax in California, Connecticut, Florida, Maine, Maryland, North Carolina, Ohio, Pennsylvania, and Rhode Island. Clothing, medicine, and goods directly consumed in production processes are other items usually exempt.

Many of the first adoptions of the sales tax were at a 2-percent rate, but the need for revenue in many states has been forcing the rate upward. Currently there are more states with a 3-percent rate than with a 2-percent rate. A summary of rates now in effect in 32 states follows:

Number of states	Rate of sales tax
12	2%
2	2½
15	3
3	4

Rates have been increased recently in Illinois, Michigan, Pennsylvania, and Washington.

Individual Income Taxes

States levy taxes on net income, as it represents ability to pay. From gross income they allow deduction for contributions, certain taxes, and significantly large medical expenses, and exemptions or tax credits for dependents.

Rates on state individual income taxes are progressive in most cases and range from 1 percent to 11 percent. The initial rate applies to the first $1000 of taxable income in many states and the upper rate applies commonly to an upper bracket of $10,000 or higher. In New York, for example, the initial rate is 2 percent on the first $1000 of taxable income and progresses to 10 percent on taxable income over $15,000.

Legislative activity on the individual income tax in 1959 has been considerable, but so far there have been no new adoptions. California, Colorado, Idaho, Minnesota, Montana, New York, Oregon, and South Carolina have adjusted their rates.

RATES OF THREE STATE TAXES (As of August 24, 1959)

State	Sales	Gasoline (per gallon)	Cigarettes (per package)
Alabama	3%	7¢	6¢
Arizona	3	5	2
Arkansas	3	6½	8
California	3	6	3
Colorado	2	6	....
Connecticut	3	6	5
Delaware	....	5	3
Florida	3	7	5
Georgia	3	6½	5
Idaho	....	6	5
Illinois	2½	5	4
Indiana	*	6	3
Iowa	2	6	4
Kansas	2	5	4
Kentucky	....	7	3
Louisiana	2	7	8
Maine	3	7	5
Maryland	3	6	3
Massachusetts	....	5½	6
Michigan	4	6	5
Minnesota	....	5	5.5
Mississippi	3	7	6
Missouri	2	3	2
Montana	....	6	8
Nebraska	....	7	4
Nevada	2	6	3
New Hampshire	....	7	15%
New Jersey	....	5	5
New Mexico	2	6	5
New York	....	6	5
North Carolina	3	7	....
North Dakota	2	6	6
Ohio	3	7	5
Oklahoma	2	6.5¢	5
Oregon	....	6	....
Pennsylvania	4	5	6
Rhode Island	3	6	3
South Carolina	3	7	5
South Dakota	2	6	5
Tennessee	3	7	5
Texas	....	5	8
Utah	2	6	4
Vermont	....	6½	7
Virginia	....	6	....
Washington	4	6½	6
West Virginia	2	7	5
Wisconsin	....	6	5
Wyoming	2	5	4

* A tax of ⅓ of 1 percent is levied on gross income.

IS STATE INCOME TAX WITHHELD FROM WAGES?

Yes	No
Alabama	Arkansas
Arizona	California
Colorado	Georgia
Delaware	Iowa
Idaho	Kansas
Kentucky	Louisiana
Maryland	Minnesota
Massachusetts	Mississippi
Montana	Missouri
New York	New Hampshire
North Carolina	New Mexico
Oklahoma	North Dakota
Oregon	Tennessee
South Carolina	Virginia
Utah	Wisconsin
Vermont	

Another feature drawing legislative attention this year is the withholding of the income tax by employers. The 1959 adoptions of general withholding include Massachusetts, New York, North Carolina, Oklahoma, South Carolina, and Utah.

Gasoline Taxes

The motor fuel tax is the heaviest revenue producer of the special sales taxes. In general, the rates on gasoline have been going steadily upward for the past few years. So far in 1959, four states have increased their rates. The most common single rate at present is 6 cents per gallon but 18 states levy a higher rate:

Number of states	Rate per gallon
1	3 cents
9	5
1	5½
19	6
4	6½
1	6.58
13	7

IS FEDERAL INCOME TAX DEDUCTIBLE FROM INCOME FOR STATE INCOME TAX PURPOSES?

Yes	No
Alabama	California
Arizona	Georgia
Arkansas	Maryland
Colorado	Massachusetts (except on business income)
Delaware (over $300)	Mississippi
Idaho	New Hampshire
Iowa	New York
Kansas	North Carolina
Kentucky	Oregon
Louisiana	South Carolina
Minnesota	Tennessee
Missouri	Vermont
Montana	Virginia
New Mexico	
North Dakota	
Oklahoma	
Utah	
Wisconsin (to 3% of net income)	

Cigarette Taxes

Like other taxes the cigarette tax has been moving upward. A decade ago the most common levy was 2 cents a pack; today, it is 5 cents.

Legislative attention has focused heavily on cigarettes this year. So far, 14 states have raised their rates, and California has adopted a tax of 3 cents a pack. Current rates are:

Number of states	Rate per pack
2	2 cents
7	3
6	4
16	5
1	5½
7	6
1	7
3	8
1	15%

Why Study Taxes?

These are but a few tax facts for the information of educators. Such information and much more is basic before alternatives may be considered.

For details see: National Education Association, Committee on Tax Education and School Finance. *Seven State Taxes: Rates and Collections.* Washington, D. C.: the Association, April 1959. 31 p. 25¢. The information given in the article on 1959 changes has been updated to August 24 rather than held at March 30 as presented in the pamphlet.

Significant Judicial Decisions

Four major educational issues decided by courts in the past decade

COURTS IN THE PAST decade have rendered many decisions which affect public education, public-school teachers, and public-school pupils. A few of these decisions made front-page headlines, such as the 1954 desegregation cases, but many others which have far-reaching effect were noticed only by school-law specialists. These cases have been decided by state and federal courts, including the Supreme Court of the United States. Four of the most significant decisions rendered since 1952 had at issue the diverse problems of desegregation, governmental immunity, the union shop for public-school teachers, and released time for religious education.

The Desegregation Decisions

In 1954, the Supreme Court of the United States in a unanimous decision held that racial segregation in the public schools is unconstitutional (*Brown* v. *Board of Education,* 347 U. S. 483 (1954)). There were those who thought that the Court had reversed itself without warning in abandoning the "separate but equal" doctrine. However, it was clear to others that the Court had been moving in this direction in previous decisions, several of them involving schools. Beginning in 1938, the Court's decisions on public education gradually weakened the "separate but equal" doctrine. That year, in a case which arose in Missouri, the Court held that to require a Negro to accept a tuition scholarship provided by the state to go to another state to attend law school was unconstitutional when a law school for white students was provided within the state. In 1948, the Court ordered the state of Oklahoma to provide legal education for Negroes equal to that provided for white students. In 1950, the Court held that the separate Negro law school provided by the state of Texas was not equal to the law school of the University of Texas. Also in 1950, the Court held that segregated seating in the graduate school of the University of Oklahoma was a denial of the equal protection of the laws to the Negro student who complained.

In the 1954 *Brown* decision, the Court faced squarely the issue of the "separate but equal" doctrine. It held, in effect, that separation of the races *per se* in the public schools is unequal and unconstitutional. The Court stated:

> We conclude that in the field of public education the doctrine of "separate but equal" has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment.

After extended hearings on the question of enforcement of its decision, the Court, in 1955, directed the lower courts to

> take such proceedings and enter such orders and decrees consistent with this opinion as are necessary and proper to admit to the public schools on a racially nondiscriminatory basis with all deliberate speed the parties to these cases.

Governmental Immunity

In 1959, the Supreme Court of Illinois reversed a 50-year-old decision by abolishing the rule that school districts are not liable in tort for the negligence of their employees (*Moliter* v. *Kane-*

land Community Unit District 302 (Ill. Sup. Ct. May 22, 1959)). A few other states, by statute, have abrogated or abolished the governmental immunity rule. However, most courts, even as they condemn the existence of the rule, have abided by it, stating that the legislature, not the court, has the power to abolish it.

Governmental immunity in tort—governmental units are not liable in damages to those injured by their personnel—is a common-law rule of long standing. It evolved from the English theory of the divine right of kings. Interestingly enough, this common-law rule of governmental immunity in tort has been abandoned in England.

In the Illinois case, the court permitted a pupil to recover damages from a school district for injuries sustained in a school bus accident. By statute in Illinois, school districts are permitted to purchase liability insurance, but the insurer must agree to waive the governmental immunity rule. Yet, under the decision overruled by the court, school districts were immune from suits for damages. The court said in discussing this anomaly:

> Under this statute [permitting insurance purchase], a person injured by an *insured* school district bus may recover to the extent of the insurance, while under the [governmental immunity] doctrine a person injured by an *uninsured* school bus can recover nothing. [Emphasis supplied.]

The court recognized that most legal scholars writing in the tort field today condemn the governmental immunity theory and rejected it with these words:

> In preserving the sovereign immunity theory, the courts have overlooked the fact that the Revolutionary War was fought to abolish that "divine right of kings" on which the theory is based.

The court also discussed three other bases which have been used by the courts to uphold the theory. The first is the "trust fund" concept. This doctrine rests on the idea that the use of school funds to pay damages is an improper diversion of public funds. In refutation, the court said:

> Actually, the payment of damage claims incurred as an adjunct to transportation of pupils is as much a proper authorized purpose as are payments of other expenses involved in operating school buses.

To the argument that the abolition of the immunity rule would present "grave" problems in school finance and administration, the court replied:

> Taxation is not the subject matter of judicial concern where justice to an individual citizen is involved. Private concerns have rarely been greatly embarrassed by this type of financial problem.

Lastly, the Illinois court answered the objection that the change in the law is the prerogative of the legislature, and concluded that it had the power to abolish the immunity rule.

> Finally, it is urged that any change in the laws should be accomplished by the legislature rather than by the court. But the doctrine of school district immunity was created by this court alone. Having found the doctrine to be unsound and unjust under present conditions, this court has not only the power but the duty to abolish that immunity.

The Union Shop

In June 1959 the Montana Supreme Court handed down a 3 to 2 decision on a case which had at issue for the first time the validity of a union-shop provision applied to public-school teachers. The court held that the Union Security Clause contained in the contract, requiring membership in the Butte Teachers Union as a condition to receiving salary increases, is illegal and void (*Benson et al.* v. *School District No. 1 of Silver Bow County et al.* (Mont. Sup. Ct., No. 9908, June 29, 1959)).

In 1956, the school district entered into a "master agreement" with the Butte Teachers Union. The agreement established a salary schedule and provided that "the single salary principle of equal salary for equal training and experience shall prevail." The agree-

ment also contained clauses which provided that all tenure teachers employed by the board of the school district must become members of the Union and maintain their membership in good standing in order to receive any salary increases negotiated by the Union. Nontenure teachers who refused to join the union were to be discharged. This "union security clause" was to be inserted in all teacher contracts.

Eight tenure teachers returned their contracts for 1956-57, signed, but with the security clause deleted. They also deleted the clause in their 1957-58 and 1958-59 contracts. As a result, these eight teachers did not receive their annual increments for any of those years; their salaries remained at the 1955-56 level.

The teachers sued to obtain an order to compel the school district to enter into contracts with them and to require the issuance of salary warrants for the payment of the salary designated under the master agreement. They requested the court to declare that the Union Security Clause was null and void and that the school district had no authority to discriminate against teachers who do not become members of the teachers union.

In holding the Union Security Clause in the contract null and void, the Montana Supreme Court stated:

> It is not competent for the school trustees to require union membership as a condition to receiving the increased salary. So far as this case is concerned it is sufficient to say that the Legislature has not given the school board authority to make the discrimination sought to be imposed here.
>
> . . . . . .
>
> For the purposes of this case it is sufficient to say that the School Trustees have no authority or power to discriminate between the teachers employed by it as to the amount of salary paid to each because of their membership or lack of membership in a labor union. The School Trustees have no authority to invade that field. As well might it be argued that the Board of School Trustees might provide that the increased salary shall not be allowed to those who do not affiliate with a certain lodge, service club, church, or political party.

Released Time

In recent years there has developed a practice of excusing pupils from the public-school program—possibly one hour a week—for religious instruction. Pupils may attend whatever class in religion they choose, or none. Religious instruction as part of the school program is forbidden by many state constitutions, statutes, and court decisions. Decisions on the constitutionality of these programs have been handed down by the high courts of several states and by the Supreme Court of the United States. Whether or not a particular released-time practice is constitutional depends upon the type of plan. Although two plans may have for their purpose the provision of released time for religious instruction, a court might uphold one but not the other because of the factors involved.

In the case of *Zorach* v. *Clauson et al.*, 343 U. S. 306, decided in 1952, the Supreme Court of the United States upheld as constitutional the released-time plan of New York City.

Four years before the *Zorach* case the Court had held that the released-time program in Champaign, Illinois, was invalid because that particular plan violated the First Amendment to the federal Constitution. The question arose in the minds of many as to the effect of this decision upon other types of released-time plans. Thus, the opinion of the Court in the *Zorach* case on the New York plan was the subject of widespread interest.

Under the New York plan, pupils were excused from school to go to religious centers for religious instruction. The excuse was conditioned upon the request of parents and the pupils' attendance. The churches reported attendance weekly to the schools. All costs were paid by the churches.

With three sharply worded dissenting opinions, the Supreme Court upheld the New York released-time plan, drawing a distinction between religious education as practiced in New York and the Champaign, Illinois, program the Court held to be invalid in the earlier decision. The majority of the Court said that the New York program was neither religious instruction in the public-school classrooms nor did it involve the expenditure of public funds for sectarian education.

Excerpts from the majority opinion follow:

The First Amendment, however, does not say that in every and all respects there shall be a separation of Church and State. Rather, it studiously defines the manner, the specific ways, in which there shall be no concert or union or dependency one on the other. That is the common sense of the matter. Otherwise the state and religion would be aliens to each other—hostile, suspicious, and even unfriendly.

. . . . . .

We are a religious people whose institutions presuppose a Supreme Being. We guarantee the freedom to worship as one chooses. We make room for as wide a variety of beliefs and creeds as the spiritual needs of man deem necessary. We sponsor an attitude on the part of government that shows no partiality to any one group and that lets each flourish according to the zeal of its adherents and the appeal of its dogma. When the state encourages religious instruction or cooperates with religious authorities by adjusting the schedule of public events to sectarian needs, it follows the best of our traditions. For it then respects the religious nature of our people and accommodates the public service to their spiritual needs. To hold that it may not would be to find in the Constitution a requirement that the government show a callous indifference to religious groups. That would be preferring those who believe in no religion over those who do believe.

In his dissent, Mr. Justice Black stated:

Here the sole question is whether New York can use its compulsory education laws to help religious sects get attendants presumably too unenthusiastic to go unless moved to do so by the pressure of this state machinery. That this is the plan, purpose, design and consequence of the New York program cannot be denied. The state thus makes religious sects beneficiaries of its power to compel children to attend secular schools. Any use of such coercive power by the state to help or hinder some religious sects or to prefer all religious sects over nonbelievers or vice versa is just what I think the First Amendment forbids. In considering whether a state has entered this forbidden field the question is not whether it has entered too far but whether it has entered at all. New York is manipulating its compulsory education laws to help religious sects get pupils. This is not separation but combination of Church and State.

Implications

The decisions in these four cases have settled the issues that were before the courts in each case; it is unlikely, however, that other cases, on similar subjects, will not reach the courts again. In the case of the desegregation decision the constitutional issue is settled, but for several years to come courts will be deciding cases based on that decision. The issues of governmental immunity and the union shop for teachers are likely to arise in states other than Illinois and Montana and may reach high courts for decision. Released-time programs for religious education which differ from the New York program may be challenged as unconstitutional and may reach the Supreme Court of the United States.

For details on cases arising in 1958 see: National Education Association, Research Division. *The Teacher's Day in Court: Review of 1958.* Research Report 1959-R7. May 1959. 48 p. 25¢. *The Pupil's Day in Court: Review of 1958.* Research Report 1959-R8. June 1959. 45 p. 25¢.

Are New College Teachers Prepared?

Only 1 in 4 has an earned doctor's degree; 2 in 10 do not have a master's degree

IS THE PREPARATION of the teacher a clue to the quality of teaching? If it is, as most people believe, the universities, colleges, and junior colleges of the United States have cause for concern if not outright alarm.

A recent NEA Research Division study divides new college teachers employed during each of the past six years into these four groups: holders of the doctor's degree, the master's degree plus one year of advanced credit, the master's degree, less than the master's degree. The study also reports the occupations claiming doctor's degree graduates of each of the past four years.

Average Preparation Falls

Here are the facts:

- In 1953-54, of *all* full-time teachers in service, 40.5 percent held an earned doctor's degree, as did 31.4 percent of the *new* teachers employed that year. In 1954-55, 28.4 percent of the *new* teachers employed had doctor's degrees; the next year, 26.7 percent; then 23.5 percent; then 25.3 percent; and, in 1958-59, 23.8 percent.
- During these six years the percent of new teachers with one year of advanced credit beyond the master's degree showed little change, rising from 18.2 to 18.7.
- The proportion of new teachers with no more than the master's degree climbed from 32.2 percent of the total in 1953-54 to 36.7 percent in 1958-59.
- The percent of new teachers employed with less than the master's degree rose from 18.2 in 1953-54 to 20.8 in 1958-59.

Practices Differ

These percents refer to *all new* teachers. The report, which divides universities and colleges into nine groups, shows that institutional policy and available resources differ widely. In one group, for example, as many as 33.0 percent of the new teachers hold the doctor's degree, while in another group only 19.8 percent have such comprehensive preparation.

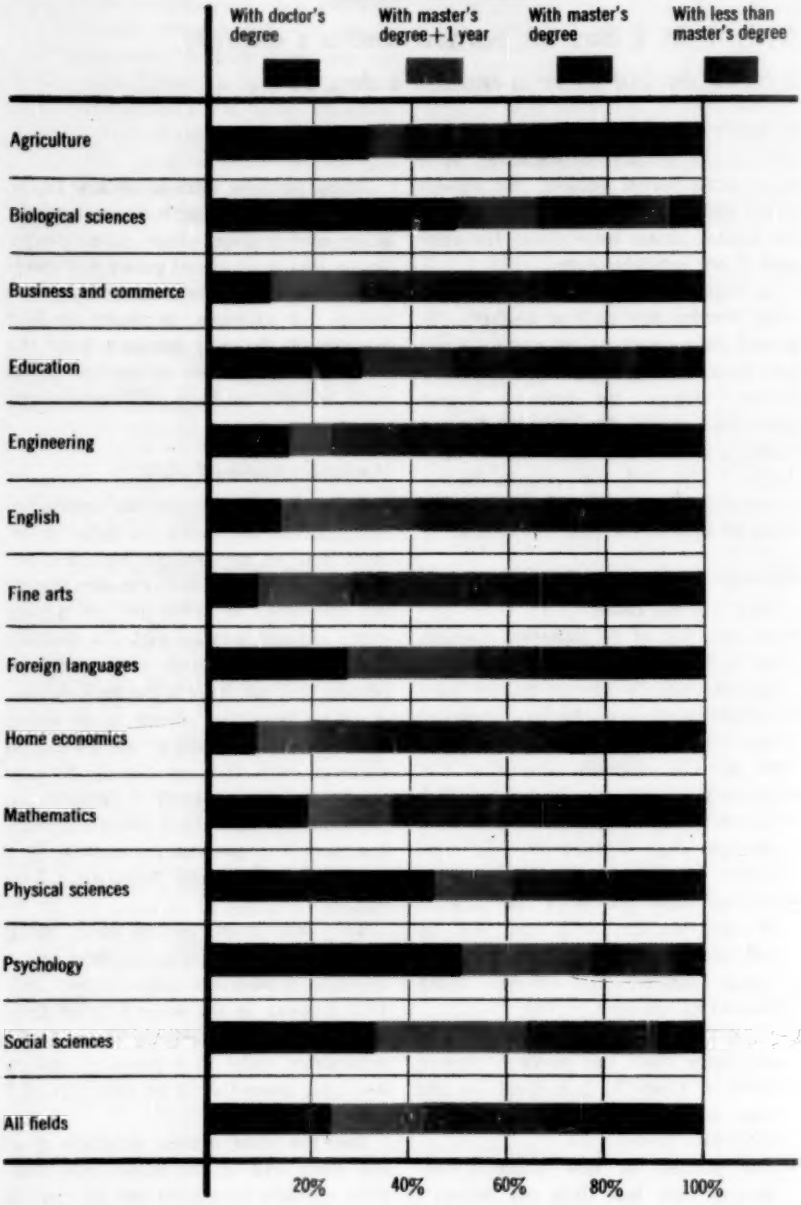
Variation Among Fields

Even wider differences are seen when comparisons are based on fields of instruction. In psychology, for example, slightly more than half the new teachers employed in 1958-59 (51.6 percent) entered service with the doctor's degree already earned, while only 5.6 percent did not have a master's degree. Among the other fields maintaining above-average standards are biological sciences, with 49.0 percent of the new teachers at the top level of preparation; physical sciences, 44.3 percent; social sciences, 33.6 percent; education, 30.8 percent; and foreign languages, 27.0 percent.

In mathematics, on the other hand, just 1 of every 5 new teachers has a doctor's degree; in engineering, only 15.8 percent; in the basic field of English, only 13.7 percent; in business and commerce, only 11.4 percent; and in fine arts, fewer than 1 of every 10 (9.2 percent).

But the most critical situation is at the other end of the scale—new full-time teachers who have not yet earned the master's degree. With much public attention focused upon engineering, the

PREPARATION OF NEW COLLEGE TEACHERS, 1958-59, BY TEACHING FIELD



Fields shown are those having at least 200.

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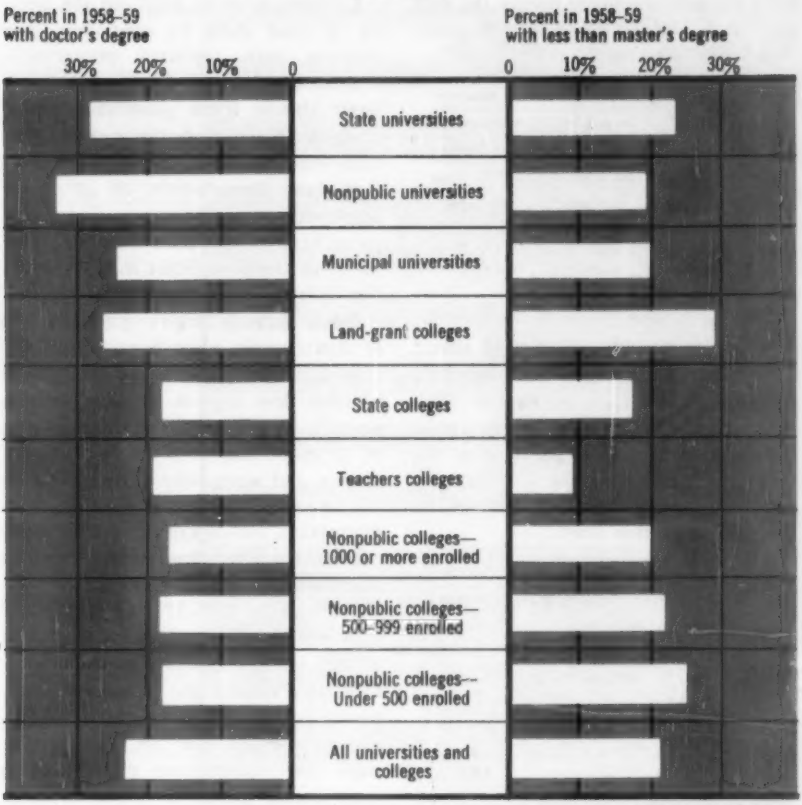
MOST NEW COLLEGE TEACHERS DO NOT HAVE A DOCTOR'S DEGREE



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universities and colleges *took 42.9 percent of their new engineering teachers from this bottom-level preparation group.* Also, 1 of every 5 new mathematics teachers (20.6 percent) entered full-time service without having earned the master's degree, as did 17.2 percent of the new teachers in physical science, 15.4 percent in foreign language, and 12.2 percent in English.

Analysis of the preparation of new full-time teachers has been made for each of the past six years. The evidence is clear that in amounts of training the teaching staffs in universities and colleges have suffered a steady deterioration throughout this period. It is equally clear that although the yearly drop in qualifications of new teachers has been slowed, there is no apparent prospect for improvement.

Junior-College Problems

The record of junior-college employment practices covers only two years, 1957-58 and 1958-59. Only about 1 of every 15 new full-time teachers entered service with the doctor's degree, compared with about 1 of every 4 for universities and colleges. Public junior

colleges fared a little better than the nonpublic. Considering all new full-time teachers employed during the past two years, the record of their preparation looks like this:

Preparation	Percent of new teachers: In public junior colleges	In nonpublic junior colleges
Doctor's degree	7.4%	6.2%
Master's degree plus one year	21.2	17.0
Master's degree	44.9	44.2
Less than master's degree	26.5	32.6

These differences in ability to attract well-prepared candidates were indicated in the Research Division Report 1958-R1, which showed a more favorable salary position of the public over the nonpublic junior colleges. Field-by-field comparisons further point up the differences in this way:

Teaching field	Percent of new teachers holding doctor's degrees: In public junior colleges	In nonpublic junior colleges
Chemistry	15.4%	8.3%
Engineering	2.8	.....
English	8.4	5.6
Foreign language	18.2	10.8
History	21.1	2.4
Mathematics	1.5	12.2
Physics	9.9	5.0
Psychology	25.0	14.3

Sources of Supply

Junior colleges drew upon the high-school staffs for 31.1 percent of their new full-time teachers, compared with 11.6 percent of all types of degree-granting institutions. New teachers coming directly from graduate school totaled 20.1 percent and 41.6 percent; while those coming directly from the preceding bachelor's degree class, 4.5 and 5.9 percent, respectively, in junior colleges and the universities and colleges.

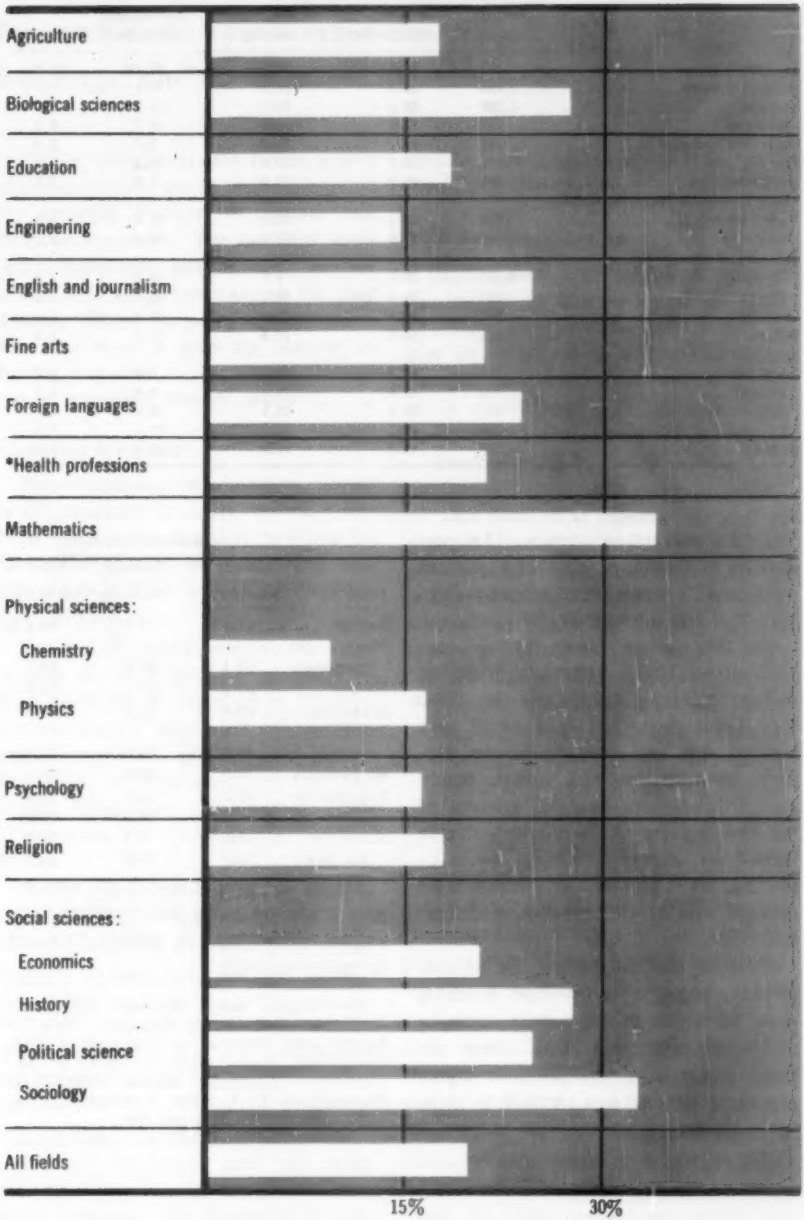
Occupations Claiming Gradutes

Colleges want to build up the quality of their staffs by employing new teachers with top-level preparation. It naturally follows, therefore, that interest should focus particularly upon newly produced graduates at the highest level—the doctor's degree. The fact that some three-fourths of all newly employed college teachers in recent years have not reached this level only serves to sharpen, rather than diminish, this interest.

Since doctor's degree graduates are in short supply when being sought for college faculties, studies are being made of what does happen to them occupationally. A great many of the graduates of 1956-57 and 1957-58 had already chosen and were fully settled in occupations well before the year of their graduation, and continued in these same occupations after that event. Thus the conferring of almost 9000 doctor's degrees both in 1956-57 and in 1957-58 must not be taken to indicate that some 18,000 comprehensively educated persons have entered the "available" manpower pool. On the contrary, investigation revealed that 46.3 percent of these two classes had already taken their career places in the total labor force, and thus their graduation—evidence of their strengthened qualifications—did not add even one unit to the reservoir of available supply.

The proportion of doctor's degree graduates already engaged in occupations in which they continued after receiving the doctorate ranged from 90.9 percent in industrial arts to 25.1 percent in chemistry. Some 3 of every 5 of the graduates in economics, English, foreign language, history, physical and health education, political science, and speech were already occupationally located. In the fields of most critical college teacher shortage, on the other hand, only 36.6 percent of new graduates in engineer-

ONLY 1 IN 5 DOCTOR'S DEGREE GRADUATES ENTERS COLLEGE TEACHING



*Excluding dentistry and medicine

For details see Research Report 1959-R10, p. 60.
Fields shown are those having at least 200 graduates.

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OCCUPATIONS OF DOCTOR'S DEGREE GRADUATES IN SELECTED FIELDS, 1956-57 AND 1957-58

Field	Number reported	Continuing in same occupation	Entering college teaching	Entering other occupations	Unknown
Agriculture	563	38.8%	17.8%	39.1%	4.3%
Biological sciences	1,238	30.7	27.3	34.6	7.4
Education	2,206	60.8	18.7	18.3	2.2
Engineering	761	36.6	14.6	46.2	2.6
English and journalism	551	66.7	24.7	5.7	2.9
Fine arts	432	63.2	20.6	8.8	7.4
Foreign languages	293	65.8	23.9	7.2	3.1
Health professions (excluding dentistry and medicine)	252	38.5	21.0	36.9	3.6
Mathematics	342	31.6	33.9	26.3	8.2
Physical sciences:					
Chemistry	1,421	25.1	9.2	60.2	5.5
Physics	670	33.6	16.3	46.7	3.4
Psychology	905	41.1	16.0	36.4	6.5
Religion	313	67.0	17.9	11.3	3.8
Social sciences:					
Economics	314	62.3	20.4	9.0	8.3
History	430	62.6	27.2	5.8	4.4
Political science	237	59.9	24.5	10.5	5.1
Sociology	206	45.1	32.5	15.1	7.3
All fields	12,378	46.3	19.8	29.1	4.8

ing, 33.6 percent in physics, 31.6 percent in mathematics, and 25.1 percent in chemistry were occupationally committed at the time of degree conferral.

On the surface, these figures seem to imply a rather generous group of college teaching candidates in these four latter fields. Only a small percent of this seemingly "generous supply," however, entered college teaching. In chemistry only 9.2 percent of the new holders of the doctor's degree turned to college teaching; in engineering, 14.6 percent; in physics, 16.3 percent; and in mathematics, 33.9 percent.

To complete the record the percent already engaged in college teaching must be added to the percent entering at the time of graduation. Here are those percents of the doctor's degree classes of 1956-57 and 1957-58 in fields of major interest:

	Percent of graduates		
Field	Already teaching	Entering teaching	Total teaching
English	61.5%	24.7%	86.2%
Foreign language	58.4	23.9	82.3
History	48.6	27.2	75.8
Economics	48.4	20.4	68.8
Political science	43.0	24.5	67.5
Mathematics	22.2	33.9	56.1
Engineering	15.6	14.6	30.2
Physics	10.3	16.3	26.6
Chemistry	6.6	9.2	15.8
All fields	24.7	19.8	44.5

Unless the proportion of doctor's degree graduates going into teaching rises, a quality shortage in college faculties seems inescapable.

For details see: National Education Association, Research Division. *Teacher Supply and Demand in Universities, Colleges, and Junior Colleges, 1957-58 and 1958-59.* Research Report 1959-R10. Washington, D. C.: the Association, June 1959. 86 p. Single copy free.

Recent Experimentation

Research seeks new ways to use staff, buildings, and audio-visual aids

MOST OF THE PROBLEMS facing public education today are a direct result of the growing shortage of human and financial resources. The need for additional manpower and revenue has received increasing attention in the past decade. Within the past few years there has also been a growing interest in finding ways to make more effective use of resources already available.

Agencies Involved

Experimentation in education, as well as improvement, is costly. In 1958, the Ford Foundation, through its Fund for the Advancement of Education, distributed over $1⅓ million for "utilization" experiments.

Some of this money went to the Commission on the Experimental Study of the Utilization of the Staff in the Secondary School, appointed by the National Association of Secondary-School Principals, a department of the National Education Association. This Commission is supervising several studies.

Other grants have gone to colleges and universities. Some have been received directly by state and local school systems. In most cases the experimentation takes place in the public schools, with the co-operation of staff, faculty, students, parents, and lay or business persons and organizations in the community.

Experiments in utilization have taken a number of forms, and are more numerous than might be suspected from isolated reports. The Research Division listed 58 localities in 31 states in which studies have been conducted, and this list is not all-inclusive.

Staff Experimentation

Experiments in the utilization of staff can be divided into two general types: (a) those involving the introduction of new personnel, such as teacher aides; and (b) those calling for reorganization of the professional staff into new teachings patterns, such as the teacher team.

Teacher aides have been used in a number of ways, some more promising to educators than others. A teacher aide may be a lay person in the community with no special training, such as a housewife, a recent high-school graduate, or a retired person with no experience in education. On the other hand, a teacher aide may be a person with special training who can contribute to some aspect of the school curriculum, or a college student planning to become a teacher, or even a student in the school itself who has shown willingness to give time to help the teachers.

The duties of the teacher aide may range from the strictly clerical to unsupervised teaching. An aide may be paid or may volunteer his services, and may work part or full time.

Some recent experiments in utilization of staff have taken the form of teacher teams. These teams are composed of two to five or six teachers responsible for the instruction of one class, usually considerably larger than normal in size. These teachers may teach the same subject or several related subjects.

The idea behind the teacher aide is to relieve the teacher of routine duties so that he will be free to attend to the main job of teaching. The object of the teacher team is to use the specific talents of each teacher in the team to the best advantage, and to offer to each group of pupils a wider range of teacher talent.

Audio-Visual Experiments

Some large-scale experiments have been made in the use of audio-visual aids as a means of direct instruction. The most spectacular of these experiments have involved the use of television, but other audio-visual aids, such as tape recorders, films, and radio, have been used to teach certain courses.

Television may be used for direct instruction in various ways. The television teacher may or may not be a member of the regular faculty. Television programs may come from a classroom or from a central studio; they may be planned jointly by the classroom teachers or by the studio teacher alone; they may be extensive or intensive in their treatment of subject matter.

At the receiving end, variation is found in the manner in which receiving classes are scheduled and supervised, and in the way in which follow-up lessons are given.

The experimenters are working on the expectation that these audio-visual aids will prove a suitable replacement for or supplement to the classroom teacher, relieving him of the teaching job for certain subjects or aspects of subjects.

Building Experiments

In one or two cases, buildings have been designed to accommodate new class patterns that result from the variations in class size, scheduling, and allocation of staff brought about by the experiments.

The school building planned to facilitate utilization experiments would be likely to have a number of rooms designed for specific functions—rooms for large group meetings, smaller rooms for discussion groups or regular classes, areas for the teacher's preparation and conferences, and special facilities for the use of audio-visual aids.

Such new buildings will probably not appear in any considerable numbers unless the other utilization experiments meet with a high level of success and acceptance.

Experimental Problems

The two most obvious solutions to problems of the shortage of educational resources—(a) increasing the resources and (b) using present resources more effectively—are not necessarily conflicting. To meet demands in the decade ahead, education will probably have to advance in both directions. However, the danger of too rapid acceptance of the results of the utilization studies must be avoided. They may mask educational needs and cause needed resources to be directed elsewhere.

Not all the experiments have been properly controlled, and, as in other experiments where human subjects are used, the experimental situation itself may influence the results, as change, introduced under normal conditions, would not.

Careful attention should be given the recent experiments in the utilization of staff, buildings, and audio-visual aids, both for the dangers they may present in too hasty acceptance of their findings, and the benefits that they may offer in improved use of educational resources.

For details see: National Education Association, Research Division. *Studies of Utilization of Staff, Buildings, and Audio-Visual Aids.* Research Report in process.

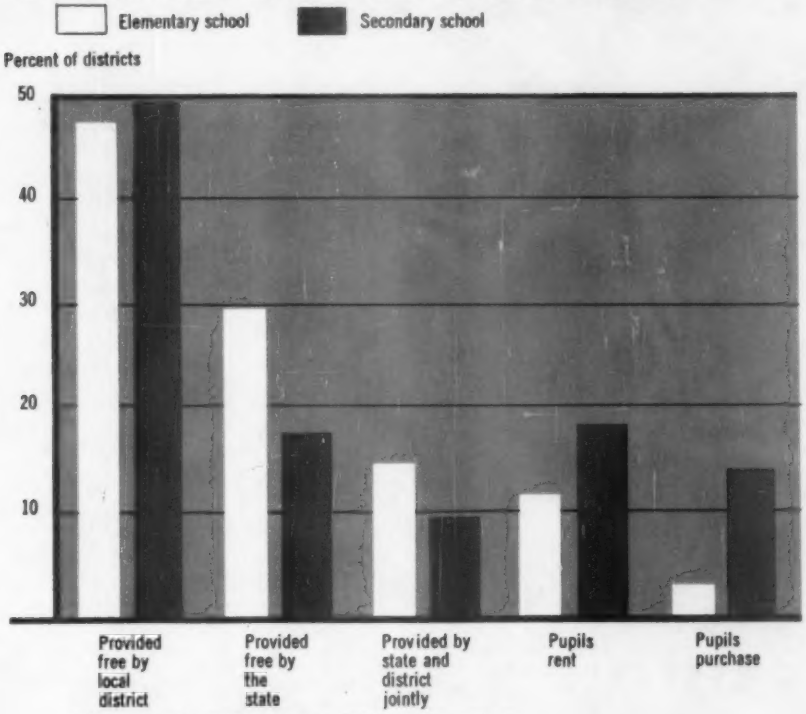
Textbooks in Public Schools

WHETHER PUBLIC-SCHOOL pupils get their books free or must rent or buy them is important to the family budget and also makes a difference in quality of instruction. A recent NEA Research Division survey provides some information for school districts 30,000 and over in population:

- The great majority of districts provide textbooks free to pupils.
- In the South free textbooks are usually paid for by the state; in the Middle Atlantic and New England states free textbooks are generally paid for by the local school districts.
- Proportionally more smaller school districts than larger districts have rental systems or depend upon state financing of free textbooks.
- Where pupils must rent their textbooks, some kind of assistance is usually provided to those who cannot afford the fees.

For details see: National Education Association, Research Division and American Association of School Administrators. *Textbook Provisions in 624 Urban School Districts.* Educational Research Service Circular No. 6, 1959. Washington, D. C.: the Association, August 1959. 35 p. $1.

TEXTBOOKS ARE PROVIDED FREE IN MOST SCHOOLS



Total is greater than 100% because some districts reported more than one method of providing textbooks at the same school level.

NEA Research Division

MR STEVENS RICE
UNIVERSITY MICROFILMS
313 NORTH FIRST ST
ANN ARBOR MICH COMP RBS

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